

Date: Thu, 2 Sep 93 04:30:25 PDT  
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>  
Errors-To: Ham-Homebrew-Errors@UCSD.Edu  
Reply-To: Ham-Homebrew@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Homebrew Digest V93 #29  
To: Ham-Homebrew

Ham-Homebrew Digest              Thu, 2 Sep 93              Volume 93 : Issue 29

Today's Topics:

Grid Dip Meters  
Microphone connectors needed  
    Need a Packet Computer?  
OCTAL PLUGS NEEDED (2 msgs)  
synchronous detector (July QST)

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>  
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 31 Aug 93 17:23:10 EDT  
From: world!ksr!jfw@uunet.uu.net  
Subject: Grid Dip Meters  
To: ham-homebrew@ucsd.edu

nat@thorn.kpc.com (Natarajan Gurumoorthy) writes:  
> Could anybody send me pointers to articles on homebrewing a grid  
>dip oscillator. Alternately could someone send me circuit that I could  
>build. I am primarily interested in the HF bands.

The ARRL Radio Amateur's Handbook usually has one; I only have the 1984  
version in my office, but it certainly does.

John, WB7EEL

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Date: Tue, 31 Aug 93 14:05:07 GMT

From: netcomsv!bongo!skyld!jangus@decwrl.dec.com  
Subject: Microphone connectors needed  
To: ham-homebrew@ucsd.edu

Radio Shack has dropped the 8-pin male chassis microphone connector from its product line. Apparently too many people have been bashing the shack rather than supporting some of thier product line. Some electronics stores have them in stock packaged by Philco, but at twice the price originally of R/S. Same quality. They had a good part there. I'm looking for a mail order source that I can accquire several of them from.

For a variety of reasons, I rather not pay \$4 each for them at Henry Radio.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our  
Internet: jangus@skyld.tele.com | universe run by a single omni-  
US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a  
Phone: 1 (310) 324-6080 | badly run corporation."

Date: Wed, 1 Sep 1993 20:34:47 GMT  
From: sdd.hp.com!col.hp.com!news.dtc.hp.com!hpscit.sc.hp.com!hplextra!hpcss01!  
hpcuhe!donh@network.ucsd.edu  
Subject: Need a Packet Computer?  
To: ham-homebrew@ucsd.edu

Anyone need a computer for Packet? I have two Heath H-89, and one H-8 computersthat I need to get out of my house, wife says OUT! These computers run a system from a floppy disk. They are NOT compatible with anything else in the world. If you have some programing experience, or want to get some, this systemis for you. I have a DOS system and also CPM. I have Basic, Cobol, and Assembly language assemblers. The H-89's are Z80 based, the H-8 is 8080. These systems are ideal for a Packet/logging system for someone who wants to play with software. I have pounds of documentation that will go with the systems, along with all kinds of software and utilities. The H-89's are terminals with the CPU built-in. The H-8 is a standalone CPU with expandable card cage. These systems provided a real learning experience for me, they are not for everyone, they are not turn-key, but I will let these go CHEAP. If you got the time, I got the Packet Computer for you. First person gets a shot at the best software choices.

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Date: Tue, 31 Aug 93 14:01:27 GMT  
From: netcomsv!bongo!skyld!jangus@decwrl.dec.com  
Subject: OCTAL PLUGS NEEDED  
To: ham-homebrew@ucsd.edu

In article <2148@arrl.org> kirk@arrl.org writes:

> I need several OCTAL plugs to use a power supply connectors on  
> a home-brew 6AG7/6146 CW rig that's nearing completion.

Newark Electronics 1 (203) 289-1416 East Hartford CT.

They stock a full series of the "old standard" tube base plugs.  
4, 5, 6, 8 and 11 contacts in a "standard" shell. Also they have  
three styles of plug-caps to cover the backs.

This is WPI, Section 8 page 608 of Catalog #112  
Mating sockets are on the previous page.

There are about hundred or so distributor offices, so I'm not  
going to list all of them. And no, I didn't see an 800 number.

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Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our  
Internet: jangus@skyld.tele.com | universe run by a single omni-  
US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a  
Phone: 1 (310) 324-6080 | badly run corporation."

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Date: Tue, 31 Aug 1993 17:38:46 GMT  
From: nwnexus!ole!ssc!markz@uunet.uu.net  
Subject: OCTAL PLUGS NEEDED  
To: ham-homebrew@ucsd.edu

Kirk Kleinschmidt, NT0Z (kirk@arrl.org) wrote:

: Greetings!

:

: I need several OCTAL plugs to use a power supply connectors on  
: a home-brew 6AG7/6146 CW rig that's nearing completion.

:

: I have the "shells," but I need a few "plug bodies," to use a  
: computer buzzword (I think it's a computer buzzword???)

Check with a relay supplier. A lot of plug in relays use

the octal base, and you can get empty relay cases for building custom modules.

Mark Zenier markz@ssc.wa.com markz@ssc.com

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Date: 31 Aug 1993 11:40:40 -0500  
From: elroy.jpl.nasa.gov!swrindle!cs.utexas.edu!news@ames.arpa  
Subject: synchronous detector (July QST)  
To: ham-homebrew@ucsd.edu

This is a repost of a sci.electronics question to which I have not gotten any responses. Perhaps some of you homebrewers can help me out.

I am building a (relatively) inexpensive high-quality shortwave receiver (primarily) for international broadcast-band listening. My current prototype uses simple diode envelope detection, and I would like to replace this with a synchronous detector. I have looked at a number of articles on synch detectors and particularly liked the one in the July QST which uses a couple of NE602's and an NE604. I'd like to try this out, but I have a couple of questions.

First, I am confused about the center frequency of the VCO (BFO) as presented in the article. By my calculations, the center frequency appears to be around 380 KHz rather than 455 KHz. Is there a mistake, or am I missing something? Even ignoring the approximate shunt capacitance of the tuning diodes, the oscillator circuit seems tuned too low.

Second, my design uses an IF frequency of 9.83 MHz. I would rather not add a second conversion to a lower IF as extra band coverage will (eventually) be provided by converters, and I'm afraid I'll be taking a fidelity hit with a triple-conversion design. Will this design work at the 9.83 IF? I know the '604 is spec'ed up to 20 Mhz and the '602 should work up to 200 Mhz, so these don't seem to present a problem. My concern is how much trouble I will have twiddling the PLL loop constant to get the locking range/rate right. I have no experience designing PLLs, and I'm worried it could be a bit tricky. I would be interested in hearing from anyone who has attempted synchronous detection at higher IF frequencies.

Finally, I would be interested in opinions on how important it is to allow a tunable BFO for listening to AM signals. I realize that this feature is required to allow listening to a single side-band, but how often is that really useful? I am mainly interested in using the synch detector to reduce distortion from selective fading. I anticipate that most listening will be

with the carrier centered in the IF filter for DSB detection. What do others think?

Has anybody out there built this or other synch detectors? We've all heard the virute of these critters; let's hear about your experiences actually getting one to work!

Thanks.

-- John Zelle  
University of Texas-Austin  
Computer Sciences

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End of Ham-Homebrew Digest V93 #29

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